APPARATUS AND METHOD FOR CONTROLLING A FUNCTION OF A WIRELESS TERMINAL

PRIORITY

[0001] This application claims the benefit under 35 U.S.C. 119(a) of an application entitled "Apparatus and Method for Controlling Function of Wireless Terminal" filed in the Korean Intellectual Property Office on Jul. 10, 2004 and assigned Serial No. 2004-53810 and to a Korean patent application filed on Aug. 19, 2004 and assigned Serial No. 2004-65337, the entire contents of which are incorporated herein by reference.

BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention

[0003] The present invention relates to a wireless terminal. More particularly, the present invention relates to an apparatus and a method for controlling a key input part and a display part of a wireless terminal according to folder housing opening/closing states of the wireless terminal and control a voice inputting/outputting part of the wireless terminal according to positions of the wireless terminal.

[0004] 2. Description of the Related Art

[0005] Wireless terminal technology has evolved to provide various functions capable of transmitting high-speed data in addition to a voice communication function. In other words, if a mobile communication network adaptable for an IMT 2000 standard is realized, high-speed data communication as well as voice communication can be achieved by using the wireless terminal. Herein, data processed by the wireless terminal may include packet data and image data. In addition, wireless terminals have been equipped with a function capable of displaying a moving picture by adding a camera and a TV receiver to the wireless terminal. Accordingly, the wireless terminal having a camera not only can display moving pictures and still pictures by photographing images, but also can transmit the photographed images. In addition, the wireless terminal having a TV receiver can display received image signals. Recently, wireless terminals are being manufactured in a structure adaptable for games. In a game mode, wireless terminals for games have a structure convenient for users. For instance, wireless terminals are equipped with two key input parts in order to allow a user to conveniently use wireless terminals when playing games. Therefore, automatic control of the functions for the games in wireless terminals will provide enhanced convenience to users of the terminals.

SUMMARY OF THE INVENTION

[0006] Accordingly, the present invention has been made to solve the above-mentioned problems occurring in the prior art, and an object of the present invention is to provide an apparatus and a method, which can control a function of a key input module according to opening/closing states of a folding wireless terminal.

[0007] It is another object of the present invention to provide an apparatus and a method, which can control a function of a display module according to opening/closing states of a folding wireless terminal.

[0008] It is still another object of the present invention to provide an apparatus and a method, which can control a speaker and a microphone disposed in at least two voice outputting modules of a wireless terminal according to positions of the wireless terminal.

[0009] To accomplish the above objects, there is provided an apparatus for controlling a key input function and a display function in a wireless terminal, the apparatus comprising a folder opening/closing detection module which comprises magnets disposed in the wireless terminal and sensors for detecting the magnets, detects a folder housing opening/closing state in the wireless terminal, and generates a folder opening/closing detection signal, a key input module which comprises a first key input module having an inner key and an external key and a second key input module having an inner key and an external key, the first key input module and the second key input module being disposed in the first folder housing and the second folder housing which pivot away from a body housing of the wireless terminal in different directions, respectively, a display module which has a first display module disposed in the second folder housing and a second display module disposed in the body housing, and a control module which controls the functions of the key input module and the display module according to the folder opening/closing signal generated from the folder opening/closing detection module.

[0010] According to another aspect of the present invention, there is provided an apparatus for controlling a key input function and a display function in a wireless terminal, comprising a folder opening/closing detection module which comprises magnets disposed in the wireless terminal and sensors for detecting the magnets, detects opening/closing states of a first folder housing and a second folder housing pivoting away from a body housing of the wireless terminal in different directions and generates a first opening/closing signal to a fourth folder opening/closing signal, a key input module which comprises a first key input module disposed in the first folder housing and a second key input module disposed in the second folder housing, the first key input module including an inner key and an external key, the second key input module including an inner key and an external key, a display module which comprises a first display module disposed in the second folder housing and a second display module disposed in the body housing, and a control module which controls the functions of the key input module and the display module according to folder opening/closing detection signals generated from the folder opening/closing detection module.

[0011] According to another aspect of the present invention, there is provided an apparatus for controlling a key input function and a display function in a wireless terminal, comprising a folder opening/closing detection module which comprises magnets disposed in the wireless terminal and sensors for detecting the magnets, detects opening/closing states of a first folder housing and a second folder housing pivoting away from a body housing of the wireless terminal in different directions, and generates a first to a fourth folder opening/closing signals, a key input module which comprises a first key input module disposed in the first folder housing and a second key input module disposed in the second folder housing, the first key input module including an inner key and an external key, the second key input module including an inner key and an external key, a display module which comprises a first display module disposed in the second folder housing and a second display